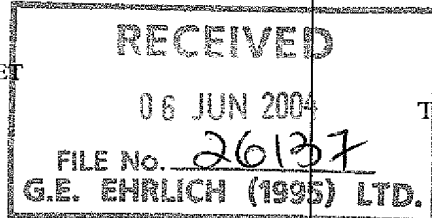


# PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To:  
GAL EHRLICH  
G. E. EHRLICH (1995) LTD.  
11 MENACHEM BEGIN STREET  
52 521 RAMAT GAN  
ISRAEL



## PCT

NOTIFICATION OF TRANSMITTAL OF  
THE INTERNATIONAL SEARCH REPORT  
OR THE DECLARATION

(PCT Rule 44.1)

Date of Mailing  
(day/month/year)

**18 MAR 2004**

(1)

Applicant's or agent's file reference  
26137

**FOR FURTHER ACTION** See paragraphs 1 and 4 below

International application No.  
PCT/IL03/00917

International filing date  
(day/month/year)

04 November 2003 (04.11.2003)

Applicant  
V-TARGET TECHNOLOGIES LTD.

1. ☒ The applicant is hereby notified that the international search report has been established and is transmitted herewith.

**Filing of amendments and statement under Article 19:**

The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):

**When?** The time limit for filing such amendments is normally two months from the date of transmittal of the international search report.

**Where?** Directly to the International Bureau of WIPO, 34, chemin des Colombettes  
1211 Geneva 20, Switzerland, Facsimile No.: (41-22) 740.14.35

**For more detailed instructions,** see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect is transmitted herewith.

3. ☐ **With regard to the protest** against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.

☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. **Reminders**

Shortly after **18 months** from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90 *bis*.1 and 90 *bis*.3, respectively, before the completion of the technical preparations for international publication.

Within **19 months** from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase **until 30 months** from the priority date (in some Offices even later); otherwise the applicant must, **within 20 months** from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.

In respect of other designated Offices, the time limit of **30 months** (or later) will apply even if no demand is filed within 19 months.

See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the *PCT Applicant's Guide*, Volume II, National Chapters and the WIPO Internet site.

Name and mailing address of the ISA/US  
Mail Stop PCT, Attn: ISA/US  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
Facsimile No. (703) 305-3230

Authorized officer

OTILIA GABOR

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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL03/00917

### Box III TEXT OF THE ABSTRACT (Continuation of Item 5 of the first sheet)

The technical features mentioned in the abstract do not include a reference sign between parentheses (PCT Rule 8.1(d)).

#### NEW ABSTRACT

Imaging apparatus (10) is provided, comprising a first device, for obtaining a first image, by a first modality, selected from the group consisting of SPECT, PET, CT, an extracorporeal gamma scan, an extracorporeal beta scan, x-rays, an intracorporeal gamma scan, an intracorporeal beta scan, an intravascular gamma scan, an intravascular beta scan, and a combination thereof, and a second modality, selected from the group consisting of a three-dimensional ultrasound, an MRI operative by an internal magnetic field, an extracorporeal ultrasound, an extracorporeal MRI operative by an external magnetic field, an intracorporeal ultrasound, an intracorporeal MRI operative by an external magnetic field, an intravascular ultrasound, and a combination thereof, and wherein the apparatus (10) further includes a computerized system (50), configured to construct an attenuation map, for the first image, based on the second, structural image. Additionally, the computerized system (50) is configured to display an attenuation corrected first image as well as a superposition of the attenuation-corrected first image and the second, structural image. Furthermore, the apparatus is operative to guide an in-vivo instrument based on superposition.

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL03/00917

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06F 3/00  
US CL : 250/363.02; 600/407

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 250/363.02, 363.01, 363.03, 363.04, 363.05, 363.08, 363.1; 600/407, 425, 431, 436

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
Please See Continuation Sheet

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 6,205,347 B1 (MORGAN et al) 20 March 2001 (20.03.2001), see abstract; Columns 5-9; Figure 1.	1-7, 27-32 ----- 8-26
X,P --- Y,P	US 6,614,453 B1 (SURI et al) 02 September 2003 (02.09.2003), see abstract; Column 4; Figure 2.	8-14 ----- 1-7, 15-39
X,P --- Y,P	US 6,592,520 B1 (PESZYNSKI et al.) 15 July 2003 (15.07.2003), see Columns 24-26; Figure 1.	43-45 ----- 15-26, 33-39, 41, 42
X,P --- Y,P	US 6,587,710 B1 (WAINER) 01 July 2003 (01.07.2003), see Columns 7-10; Figure 5.	40-42 ----- 33-39
Y,P	US 6,628,983 B1 (GAGNON) 30 September 2003 (30.09.2003), see abstract; Columns 11-16; Figure 1.	1-45



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	"&" document member of the same patent family

Date of the actual completion of the international search

20 February 2004 (20.02.2004)

Date of mailing of the international search report

18 MAR 2004

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US  
Commissioner for Patents  
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*[Signature]*

# INTERNATIONAL SEARCH REPORT

PCT/IL03/00917

## C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,243,988 A (SIEBEN et al) 14 September 1993 (14.09.1993), see abstract; Figure 1.	40-45
A,P	US 6,628,984 B2 (WEINBERG) 30 September 2003 (30.09.2003), see entire disclosure.	1-45
A	US 6,346,706 B1 (ROGERS et al) 12 February 2002 (12.02.2002), see entire disclosure.	1-45

# INTERNATIONAL SEARCH REPORT

PCT/IL03/00917

## Continuation of B. FIELDS SEARCHED Item 3:

USPTO WEST 2.0

search terms: imaging, PET, SPECT, CT, gamma scan, beta scan, probe, attenuation correction, structural image, nuclear image, X-rays, in-vivo

## NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under Article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the *PCT Applicant's Guide*, a publication of WIPO.

In these Notes, "Article," "Rule" and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions, respectively.

### INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only.

#### **What parts of the international application may be amended ?**

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Preliminary Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

**When ?** Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

#### **Where not to file the amendments ?**

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been/is filed, see below.

**How ?** Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

**The amendments must be made in the language in which the international application is to be published.**

#### **What documents must/may accompany the amendments ?**

**Letter (Section 205(b)):**

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

**The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.**